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# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

**MAILED** 

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Application Number: 09/677,993 Filing Date: October 03, 2000 Appellant(s): WITTE ET AL.

**GROUP 3600** 

D. Scott Moore (Reg. No. 42,011) For Appellant

**EXAMINER'S ANSWER** 

This is in response to the appeal brief filed February 8, 2007 appealing from the Office action mailed August 9, 2006.

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## (1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

#### (2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

#### (3) Status of Claims

The statement of the status of claims contained in the brief is correct.

## (4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

#### (5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

#### (6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

#### (7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

#### (8) Evidence Relied Upon

"Webhire Links Corporate Recruiting Desktops to Over 2,000 Job Posting Sites." Business Wire, Page 1, March 2, 2000.

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Callan et al. "Searching Distributed Collections With Inference Networks." Annual ACM Conference on Research and Development in Information Retrieval: Proceedings of the 18<sup>th</sup> Annual International ACM SIGIR Conference on Research and Development in Information Retrieval, Pages 21-28, 1995.

Qureshi et al. "Artificial Intelligence in Accounting and Business." National Public Accountant, vol. 43, no. 7, pages 13-18, September 1998.

#### (9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1, 3-7, 10-14, 16-23, 25, 26, 28-32, 35-39, 41-48, 50-54, 57-61, and 63-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Webhire (as disclosed in "Webhire Links Corporate Recruiting Desktops to Over 2,000 Job Posting Sites") in view of Callan et al. ("Searching Distributed Collections With Inference Networks") and further in view of Qureshi et al. ("Artificial Intelligence in Accounting and Business").

#### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3-7, 10-14, 16-23, 25, 26, 28-32, 35-39, 41-48, 50-54, 57-61, and 63-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Webhire (as disclosed in "Webhire Links Corporate Recruiting Desktops to Over 2,000 Job Posting

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Sites") in view of Callan et al. ("Searching Distributed Collections With Inference

Networks") and further in view of Qureshi et al. ("Artificial Intelligence in Accounting and
Business").

Webhire discloses a method of selecting a job post site, comprising:

[Claim 1] obtaining at least one job post site selection criterion (Webhire: ¶ 6 –

"Corporate recruiters indicate the type of position they are filling, for example,
engineering or accounting, and quickly receive an online listing of the specific job sites
within the service that are most likely to attract qualified candidates for those specific
openings");

automatically ranking a plurality of job post sites based on the at least one job post site selection criterion (Webhire:  $\P\P$  2, 6 – "...quickly receive an online listing of the specific job sites within the service that are most likely to attract qualified candidates for those specific openings." By identifying the best web sites, it is understood that the best web sites are ranked more highly than other existing job posting sites);

selecting the job post site from the plurality of job post sites based on the ranking of the plurality of job post sites (Webhire: ¶ 5 – "Using Webhire's integrated job posting, corporate recruiters enter a job description once, and with just a few mouse clicks, send that job to any or all of the over two thousand recruiting destinations now available"); [Claim 3] wherein obtaining the at least one job post site selection criterion comprises:

obtaining a geographic location criterion (Webhire:  $\P$  6 – "Job site searches can also be targeted regionally");

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obtaining a skill set criterion (Webhire: ¶ 6 – "Corporate recruiters indicate the type of position they are filling, for example, engineering or accounting, and quickly receive an online listing of the specific job sites within the service that are most likely to attract qualified candidates for those specific openings." A specific job position is understood to require a particular skill set criterion); and

obtaining a job post site performance criterion that is indicative of a value of a job post site in acting as a source for candidates (Webhire: ¶ 6 – "Corporate recruiters indicate the type of position they are filling, for example, engineering or accounting, and quickly receive an online listing of the specific job sites within the service that are most likely to attract qualified candidates for those specific openings. Job site searches can also be targeted regionally or focused on specific attributes, such as diversity candidates or college graduates");

[Claim 4] wherein automatically ranking the plurality of job post sites based on the at least one job post site selection criterion comprises:

identifying job post sites of the plurality of job post sites that satisfy the geographic location criterion (Webhire:  $\P\P$  2, 5, 6);

ranking the identified job post sites that satisfy the geographic location criterion based on the job post site performance criterion to generate a geographic location and job post site performance ranked list of job post sites (Webhire: ¶¶ 2, 5, 6);

identifying job post sites of the plurality of job post sites that satisfy the skill set criterion (Webhire: ¶¶ 2, 5, 6); and

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ranking the identified job post sites that satisfy the skill set criterion based on the job post site performance criterion to generate a skill set and job post site performance ranked list of job post sites (Webhire: ¶¶ 2, 5, 6).

Regarding claim 1, Webhire does not expressly disclose how the job post sites are ranked; however, it is clear that Webhire must use some established methodology for successfully performing such a task. The Examiner submits that there were various approaches to ranking search results by relevance at the time of Applicant's invention. For example, Callan discusses the use of inference networks (which inherently utilize inference engines) to rank document collections based on the relevance of the documents to a given query (Callan: ¶¶ 1, 14-21). The Examiner submits that inference networks/engines require use of a fact table, such as a knowledge or experience base. in order to make decisions. This assertion is supported in ¶¶ 6 and 10 of Qureshi. Qureshi also explains several benefits of expert systems, such as those incorporating inference engines. These benefits include: consistency and reliability, completeness and timeliness in reviewing transactions, quicker decision making than human experts. greater security than an expert employee who may leave the company for a competitor, capture and documentation of scarce expertise, etc. (Qureshi: ¶ 38). Since Webhire must use some methodology for ranking its job post sites and the use of inference engines (in combination with a knowledge/experience base, i.e., a fact table) to rank document results based on relevance to a specified query is old and well-known (as taught by Callan and Qureshi), the Examiner submits that it would have been obvious to

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one of ordinary skill in the art at the time of Applicant's invention to modify Webhire to access a fact table that contains data relevant to the at least one job post site selection criterion and use an inference engine to process the at least one job post site selection criterion and the fact table to rank the plurality of job post sites based on the at least one job post site selection criterion in order to reap the benefits of inference engines, including consistency and reliability, completeness and timeliness in reviewing transactions, quicker decision making than human experts, greater security than an expert employee who may leave the company for a competitor, capture and documentation of scarce expertise, etc. (as taught by Qureshi: ¶ 38).

Regarding claims 5-7, the Webhire-Callan-Qureshi combination discussed above addresses a modified version of Webhire that effectively uses an inference engine to rank job post sites based on a query specifying geographic location, skill set, and job post site performance criteria. Claims 5-7 are directed toward the details of looking up geographic location, skill set, and job post site performance criteria in a fact table, which has already been addressed by the Webhire-Callan-Qureshi combination; therefore, the limitations of claims 5-7 are similarly deemed to be addressed by the rejection of claims 1, 3, and 4 above.

Webhire discloses a method for posting a job opening description, comprising:

[Claim 10] obtaining at least one job post site selection criterion (Webhire: ¶ 6 —

"Corporate recruiters indicate the type of position they are filling, for example,
engineering or accounting, and quickly receive an online listing of the specific job sites

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within the service that are most likely to attract qualified candidates for those specific openings");

automatically ranking a plurality of job post sites based on the at least one job post site selection criterion (Webhire:  $\P\P$  2, 6 – "...quickly receive an online listing of the specific job sites within the service that are most likely to attract qualified candidates for those specific openings." By identifying the best web sites, it is understood that the best web sites are ranked more highly than other existing job posting sites);

selecting the job post site from the plurality of job post sites based on the ranking of the plurality of job post sites (Webhire: ¶ 5 – "Using Webhire's integrated job posting, corporate recruiters enter a job description once, and with just a few mouse clicks, send that job to any or all of the over two thousand recruiting destinations now available");

posting the job opening description to the selected at least one job post site (Webhire: ¶ 5 – "Using Webhire's integrated job posting, corporate recruiters enter a job description once, and with just a few mouse clicks, send that job to any or all of the over two thousand recruiting destinations now available");

[Claim 12] wherein selecting the at least one job post site from the plurality of job post sites based on the ranking of the plurality of job post sites comprising:

displaying the ranked plurality of job post sites to an end user (Webhire:  $\P\P$  2, 5, 6); and

obtaining user input to select the at least one job post site from the ranked plurality of job post sites from the end user (Webhire:  $\P\P$  2, 5, 6);

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[Claim 13] wherein selecting the at least one job post site from the plurality of job post sites based on the ranking of the plurality of job post sites comprises:

selecting the at least one job post site from the plurality of job post sites based on the ranking of the plurality of job post sites independent of user input (Webhire: ¶¶ 2, 5, 6);

[Claim 14] wherein posting the job opening description to the selected at least one job post site comprises:

converting the job opening description into a format compatible with the selected at least one job post site (Webhire: ¶¶ 2, 5, 6 -- Conversion of data into a proper format for a given website is inherent to Internet communications); and

sending the converted job opening description to the at least one job post site (Webhire:  $\P\P 2, 5, 6$ );

[Claim 16] obtaining a job post site performance criterion that is indicative of a value of a job post site in acting as a source for candidates (Webhire: ¶¶ 2, 5, 6); and

wherein the at least one job post site selection criterion comprises:

a geographic location criterion (Webhire:  $\P\P$  2, 5, 6); and

a skill set criterion (Webhire: ¶¶ 2, 5, 6);

[Claim 17] wherein ranking the plurality of job post sites based on the at least one job post site selection criterion comprises:

identifying job post sites of the plurality of job post sites that satisfy the geographic location criterion (Webhire: ¶¶ 2, 5, 6);

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automatically ranking the identified job post sites that satisfy the geographic location criterion based on the job post site performance criterion to generate a geographic location and job post site performance ranked list of job post sites (Webhire: ¶¶ 2, 5, 6);

identifying job post sites of the plurality of job post sites that satisfy the skill set criterion (Webhire: ¶¶ 2, 5, 6); and

automatically ranking the identified job post sites that satisfy the skill set criterion based on the job post site performance criterion to generate a skill set and job post site performance ranked list of job post sites (Webhire: ¶¶ 2, 5, 6);

[Claim 18] automatically ranking the geographic location and job post site performance ranked list of job post sites with the skill set and job post site performance ranked list of job post sites to generate a geographic location, skill set, and job post site performance ranked list of job post sites (Webhire: ¶¶ 2, 5, 6);

[Claim 19] wherein selecting the at least one job post site from the plurality of job post sites based on the ranking of the plurality of job post sites comprises:

selecting the job post sites in the geographic location, skill set, and job post site performance ranked list of job post sites (Webhire: ¶¶ 2, 5, 6);

[Claim 20] wherein posting the job opening description to the selected at least one job post site comprises:

converting the job opening description into a respective format compatible with a respective one of the job post sites in the geographic location, skill set, and job post site

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performance ranked list of job post sites (Webhire: ¶¶ 2, 5, 6 - Conversion of data into a proper format for a given website is inherent to Internet communications); and

sending the respective converted job opening description to the respective one of the job post sites in the geographic location, skill set, and job post site performance ranked list of job post sites (Webhire: ¶¶ 2, 5, 6 -- Conversion of data into a proper format for a given website is inherent to Internet communications);

[Claim 21] wherein selecting the at least one job post site from the plurality of job post sites based on the ranking of the plurality of job post sites comprises:

displaying the geographic location, skill set, and job post site performance ranked list of job post sites to an end user (Webhire: ¶¶ 2, 5, 6); and

obtaining user input to select the at least one job post site from the geographic location, skill set, and job post site performance ranked list of job post sites from the end user (Webhire: ¶¶ 2, 5, 6);

[Claim 22] wherein posting the job opening description to the selected at least one job post site comprises:

converting the job opening description into a format compatible with the at least one job post site from the geographic location, skill set, and job post site performance ranked list of job post sites obtained from the end user (Webhire: ¶¶ 2, 5, 6 -- Conversion of data into a proper format for a given website is inherent to Internet communications); and

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sending the converted job opening description to the at least one job post site from the geographic location, skill set, and job post site performance ranked list of job post sites obtained from the end user (Webhire: ¶¶ 2, 5, 6).

Regarding claim 10. Webhire does not expressly disclose how the job post sites are ranked; however, it is clear that Webhire must use some established methodology for successfully performing such a task. The Examiner submits that there were various approaches to ranking search results by relevance at the time of Applicant's invention. For example, Callan discusses the use of inference networks (which inherently utilize inference engines) to rank document collections based on the relevance of the documents to a given query (Callan: ¶¶ 1, 14-21). The Examiner submits that inference networks/engines require use of a fact table, such as a knowledge or experience base. in order to make decisions. This assertion is supported in ¶¶ 6 and 10 of Qureshi. Qureshi also explains several benefits of expert systems, such as those incorporating inference engines. These benefits include: consistency and reliability, completeness and timeliness in reviewing transactions, quicker decision making than human experts. greater security than an expert employee who may leave the company for a competitor. capture and documentation of scarce expertise, etc. (Qureshi: ¶ 38). Since Webhire must use some methodology for ranking its job post sites and the use of inference engines (in combination with a knowledge/experience base, i.e., a fact table) to rank document results based on relevance to a specified query is old and well-known (as taught by Callan and Qureshi), the Examiner submits that it would have been obvious to Art Unit: 3694

one of ordinary skill in the art at the time of Applicant's invention to modify Webhire to access a fact table that contains data relevant to the at least one job post site selection criterion and use an inference engine to process the at least one job post site selection criterion and the fact table to rank the plurality of job post sites based on the at least one job post site selection criterion in order to reap the benefits of inference engines, including consistency and reliability, completeness and timeliness in reviewing transactions, quicker decision making than human experts, greater security than an expert employee who may leave the company for a competitor, capture and documentation of scarce expertise, etc. (as taught by Qureshi: ¶ 38).

Regarding claim 11, Webhire does not expressly teach that the job opening description comprises an extensible markup language (XML) data stream; however, Official Notice is taken that it is old and well-known in the art of web-based programming to encode web sites that pull information from databases using XML since XML provides the benefit of more efficient dynamic content management. Since Webhire is implement over the Internet and manages job posting information (which tends to be very dynamic in nature), the Examiner submits that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the Webhire-Callan-Qureshi combination's job opening description to comprise an extensible markup language (XML) data stream in order to facilitate more efficient management of the dynamic content.

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[Claims 23, 25] Claims 23 and 25 recite limitations already addressed by the rejection of claims 1, 3-7, 10-14, and 16-22 above; therefore, the same rejection applies. Furthermore, as per claim 23, while neither Webhire nor Callan nor Qureshi expressly teaches that a search query is parsed before the search is run, Official Notice is taken that it is old and well-known in the art of database management to run searches off of a parsed query. This search strategy facilitates natural language-based searching, which is easier for many people to use since many users find it more intuitive than creating structured queries (especially if the users do not have much programming knowledge). Therefore, the Examiner submits that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the Webhire-Callan-Qureshi combination to incorporate a job opening description parser module that is configured to parse the job opening description to obtain at least one job post site selection criterion in order to provide users with an interface that is more intuitive than creating structured queries (especially if the users do not have much programming knowledge).

Regarding claim 25, conversion of data into a proper format for a given website is inherent to Internet communications and web site generation; therefore, the recited conversion functionality is addressed by the Webhire-Callan-Qureshi combination.

[Claims 26, 28-32] Claims 26 and 28-32 recite limitations already addressed by the rejection of claims 1 and 3-7 above; therefore, the same rejection applies.

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[Claims 35-39, 41-47] Claims 35-39 and 41-47 recite limitations already addressed by the rejection of claims 10-14 and 16-22 above; therefore, the same rejection applies. [Claims 48, 50-54] Claims 48 and 50-54 recite limitations already addressed by the rejection of claims 1 and 3-7 above; therefore, the same rejection applies.

[Claims 57-61, 63-67] Claims 57-61 and 63-67 recite limitations already addressed by the rejection of claims 10-14 and 16-22 above; therefore, the same rejection applies.

#### (10) Response to Argument

Appellant argues that there is no motivation to combine the cited references (pages 7-10 of the Appeal Brief). More specifically, Appellant submits that "none of the cited references include any clear and particular evidence of why it would be desirable to use an inference engine for ranking job post sites... Applicants can find no disclosure in either Callan or Qureshi that suggest it may be desirable to use an expert system to address the problem of selecting a job post site from among a plurality of job post site candidates." (Page 9 of the Appeal Brief) The Examiner respectfully disagrees. As explained in the art rejection, it is clear that Webhire must use some established methodology for successfully performing the disclosed task of ranking job post sites. The Examiner submits that there were various approaches to ranking search results by relevance at the time of Appellant's invention. For example, Callan discusses the use of inference networks (which inherently utilize inference engines) to rank document collections based on the relevance of the documents to a given query (Callan: ¶¶ 1, 14-21). The Examiner submits that inference networks/engines require use of a fact table, such as a knowledge or experience base (e.g., a library of historical cases that are

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deemed to be relevant based on a common fact pattern), in order to make decisions. This assertion is supported in ¶¶ 6 and 10 of Qureshi as well as Appellant's own description of a fact table as "contain[ing] fact pattern data relevant to one or more...site selection criterion" (page 16 of the specification). Qureshi also explains several benefits of expert systems, such as those incorporating inference engines. These benefits include: consistency and reliability, completeness and timeliness in reviewing transactions, quicker decision making than human experts, greater security than an expert employee who may leave the company for a competitor, capture and documentation of scarce expertise, etc. (Qureshi: ¶ 38). Since Webhire must use some methodology for ranking its job post sites and the use of inference engines (in combination with a knowledge/experience base, i.e., a fact table) to rank document results based on relevance to a specified query is old and well-known (as taught by Callan and Qureshi), the Examiner submits that it would have been obvious to one of ordinary skill in the art at the time of Appellant's invention to modify Webhire to access a fact table that contains data relevant to the at least one job post site selection criterion. and use an inference engine to process the at least one job post site selection criterion and the fact table to rank the plurality of job post sites based on the at least one job post site selection criterion in order to reap the benefits of inference engines, including consistency and reliability, completeness and timeliness in reviewing transactions. quicker decision making than human experts, greater security than an expert employee who may leave the company for a competitor, capture and documentation of scarce expertise, etc. (as taught by Qureshi: ¶ 38).

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Callan and Qureshi disclose search methodologies that can be applied to searching documents of any type of subject matter. From the standpoint of the Callan and Qureshi references, the particular type of subject matter of the searched documents amounts to nothing more than mere intended use and non-functional, descriptive data. Therefore, the Examiner maintains that one of ordinary skill in the art at the time of Appellant's invention would have indeed been motivated to combine the teachings of the cited references for the reasons set forth in the art rejection.

Also, Examiner notes that, as per MPEP § 2144.03(C), the statements of Official Notice made in the art rejection stand as admitted prior art since Appellant has not traversed the Examiner's assertions of Official Notice. More specifically, the following statements of Official Notice have been formally established on record as admitted prior art:

Official Notice is taken that it is old and well-known in the art of web-based programming to encode web sites that pull information from databases using XML since XML provides the benefit of more efficient dynamic content management.

Official Notice is taken that it is old and well-known in the art of database management to run searches off of a parsed query.

In conclusion, Appellant's arguments are not persuasive.

# (11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

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Respectfully submitted,

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